

Active learning

Science

Transcript of video

This video is available from www.qcaa.qld.edu.au/kindergarten/professional-topics/intentional-teaching/active-learning

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Kindergarten teachers can best support children's early understanding of science concepts, by providing a learning environment where they feel free to inquire, to ask lots of questions.

Children are natural inquirers, but they ask a range of types of questions. Some of the types are where they just want information like how long will it take for the egg to hatch, or they might ask more complicated questions like why is the sky blue. Or a philosophical question like why do we have birds or lizards.

But the questions teachers can most work with with children are those where they can actually undertake an inquiry and test something out that is of interest to the children.

Supporting children's investigation in kindergarten helps to develop their sense of awe and wonder about life and about how our world works.

My wish for kindergarten children would be that they have the opportunity to continue asking questions and having ways to find answers to those questions that are meaningful for them.

Desley Jones

Director/Kindergarten
teacher

I think science is all around us, and it's not necessarily about the content, it's about the processes in science. It's about encouraging them to be curious, and to notice things. Encouraging them to want to test things out and hypothesise what might happen, and watching the little boy get so excited about when you pour the water in here, it's going to go under the ground, through the pipe and out the other side ... was so thrilling for him.

Teaching excerpt

Desley

What was the experiment that you did?

Harry

We put water down through that white pipe, and it came all the way down there.

Desley

Did you see it down the end?

Harry

Yeah.

Desley

Could you show me that? I missed it.

Harry

And ... right through here, and it came back out. Jacob and I can do that too.

- Desley If I bring a bucket of water, can we put it down that hole and see how it comes out?
- Harry Yeah.
- Desley I'll bring one over. I didn't know that would happen. So, Harry, where do we have to tip the water in?
- Harry Through that.
- Desley Can you do that, do you think? Will we do it together? You take one side, I'll take one side. Ready, down through that pipe, do we go too fast?
- Harry And I'll go ...
- Desley You check the other end. Let me know when it's coming out.
- Harry There's water coming out, there's water coming out.
- Desley Is it coming out already?
- Harry Yeah.
- Desley Oh, there it goes.

End of excerpt

- Desley Our episode with the drainpipe and the water, started from talking about a tree, as it does, or not. We had been planting trees, and one of the little boys said to me, the pipe's out the other side. Then he showed me, he discovered that when you put water in one end of the pipe, right up by the shed. It would go through under the ground and come out. So then we wondered what would happen if you went further up the drain and whether that would still work. Like up the drain and around the corner, which is what we did, and we started putting buckets of water in.
- But the first bucket didn't make it, so we had to add extra buckets. It could be that there's a lot of dirt in the drain. So it was that going back, that excitement of seeing how many will it take, when will that water be coming through the pipe at the other end. You could see that he was totally involved in that idea of seeing, when will I get the reaction to this action.

Teaching excerpt

- Desley Well now I'm wondering when we started digging the hole, we were digging here. Was that a problem when the pipe was there?
- Harry No, no the pipe was here.
- Desley Oh, under that one. So what did you have to do?

- Harry You had to keep doing it over here.
- Desley Right, did you have to move where the tree was?
- Harry No, we just we did not dig right there.
- Desley Right, so you dug in a different place to keep it safe?
- Harry Yes, here.
- Facilitator To support kindergarten children's learning and development in Active learning, teachers can:
- Build on child's interest and curiosity
 - Encourage questioning, predicting and investigating
 - Foster a sense of awe and wonder about the world.